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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/882,938	06/15/2001		Marius Goldenberg	75622.P0037	75622.P0037 9456		
22503	7590	07/31/2002					
DAVIS &		ATES	EXAMINER				
P.O. BOX 1 Dripping		, TX 78620		NGUYEN,	NGUYEN, KHANH V		
				ART UNIT	PAPER NUMBER		
				2817			
				DATE MAIL ED. 07/21/2002			

Please find below and/or attached an Office communication concerning this application or proceeding.

			<i>\</i> ^	
	Application N .	Applicant(s)		
Office Action Commons	09/882,938	GOLDENBERG, N	GOLDENBERG, MARIUS	
Offic Action Summary	Examiner	Art Unit		
	Khanh V. Nguyen	2817		
The MAILING DATE of this communication app Period for Reply	pears on the cover she it w	ntn tne correspondenc ad	aress	
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a y within the statutory minimum of thi will apply and will expire SIX (6) MO , cause the application to become A	reply be timely filed  rty (30) days will be considered timely  NTHS from the mailing date of this co  BANDONED (35 U.S.C. § 133).	/. ommunication.	
1) Responsive to communication(s) filed on 15.	<u>June 2001</u> .			
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	is action is non-final.			
3) Since this application is in condition for allow			e merits is	
closed in accordance with the practice under <b>Disposition of Claims</b>	Ex parte Quayle, 1935 C	.D. 11, 453 O.G. 213.		
4) Claim(s) 1-20 is/are pending in the application	1.			
4a) Of the above claim(s) is/are withdra	wn from consideration.			
5)⊠ Claim(s) <u>13-20</u> is/are allowed.				
6)⊠ Claim(s) <u>1,3 and 7-10</u> is/are rejected.				
7) Claim(s) <u>2,4-6,11 and 12</u> is/are objected to.				
8) Claim(s) are subject to restriction and/o	r election requirement.			
9) The specification is objected to by the Examine	r.			
10)⊠ The drawing(s) filed on 15 June 2001 is/are: a)	☐ accepted or b)⊠ objecte	ed to by the Examiner.		
Applicant may not request that any objection to th	e drawing(s) be held in abey	vance. See 37 CFR 1.85(a).		
11) The proposed drawing correction filed on	_ is: a)☐ approved b)☐	disapproved by the Examina	er.	
If approved, corrected drawings are required in re	-			
12)☐ The oath or declaration is objected to by the Ex	aminer.			
Priority under 35 U.S.C. §§ 119 and 120				
13) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).		
a) ☐ All b) ☐ Some * c) ☐ None of:				
1. Certified copies of the priority document				
2. Certified copies of the priority document				
<ul><li>3. Copies of the certified copies of the prio application from the International But</li><li>* See the attached detailed Office action for a list</li></ul>	reau (PCT Rule 17.2(a)).		Stage	
14) ☐ Acknowledgment is made of a claim for domest	ic priority under 35 U.S.C	. § 119(e) (to a provisional	application).	
<ul> <li>a) ☐ The translation of the foreign language pro</li> <li>15)☐ Acknowledgment is made of a claim for domest</li> </ul>	* *			
Attachment(s)				
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ol>	5) Notice of	v Summary (PTO-413) Paper No f Informal Patent Application (PT		
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# **DETAILED ACTION**

#### **Drawings**

Figures 3 and 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted PRIOR ART in view of Bruccoleri et al. (5,736,880).

Regarding claim 1, PROR ART (Fig. 4) discloses the claimed invention except a plurality of transconductors associated with each node (A or B).

Bruccoleri et al. (Fig. 6) disclose an amplifier circuit having a common mode rejection, wherein Figure 6 discloses a plurality of current generators (Gc1-Gc4) can be read as a plurality of transconductors associated to each node (A and B).

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Accordingly, it would have been obvious in view of the references, taken as a whole, to have modified the circuit of PRIOR ART to have included an additional current source, as exemplarily taught by Bruccoleri et al. Such, as modification would have imparted the advantageous benefit of ensuring high speed and enhancing the precision of the circuit (see ABSTRACT) as taught by Bruccoleri et al., to PRIOR ART reference, thereby suggesting the obviousness of such a modification.

Regarding claim 3, wherein PRIOR ART discloses an adjustable transconductance (gB).

Regarding claim 7, each branch of Bruccoleri et al. circuit disclose two current sources which can be read as two transconductors.

Regarding claim 8, the transconductance value of the transconductor would have been obvious matter of design choice since it is result effective variable. Bruccoleri et al. also disclose that current generators (Gc1-Gc4) are of the same type.

Regarding claims 9, 10, Bruccoleri et al. implemented CMOS integrated circuit (see col. 5, lines 4-42).

# Allowable Subject Matter

Claims 2, 4-6, 11, 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 13-20 are allowed.



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The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2, no prior art teaches elements disclosed and further teaches the transconductors capable of being decoupled from its associated node and recoupled to a complementary node.

Regarding claims 4-6, 11, 12, no prior art teaches elements disclosed and a calibration engine varies each of the adjustable transconductances until a sensed differential voltage across the differential node pair is substantially zero.

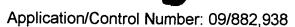
Regarding claims 13-20, no prior art teaches the step disclosed and further step of adjusting at least one adjustable transconductor until a differential voltage across the differential node pair is substantially zero.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional reference (Cargill (5,668,468)) shows further analogous prior art circuitry (circuit having common mode rejection).

This art is deemed relevant and should be carefully reviews before any amendment is filed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (703) 306-9058. The examiner can normally be reached from 8:00 AM-5:00 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service at (703) 872-9317.

 $\mathcal{N}KV$ 

07/25/02

Nguyen, Khanh Van

Group 2800, Art Unit 2817